

rainless, conditions were practically ideal for picking and ginning; in Texas the crop was largely made. The weather interfered with opening of bolls and delayed picking and ginning in the eastern belt; some damage to staple was reported where rains were heaviest.

Excellent conditions for picking and ginning prevailed during the last decade in the western belt and this work made rapid progress. In Oklahoma picking made satisfactory advance, although much of the crop was irregular with short and low-grade staple. In Texas, the crop was practically made, with poor prospects for a top crop. In the eastern belt heavy to excessive rains and floods were very unfavorable, especially in the Carolinas,

Georgia, and parts of Alabama, with picking practically at a standstill.

Miscellaneous crops.—Pastures showed improvement in some sections, but in others they are short and poor. Livestock held up well. Potato digging was well advanced at the close of the month, and, except for some more or less local harm from frost, truck did well. Sugar-beet digging progressed and sugar cane was generally favored. Nearly all tobacco was cut in Kentucky at the close of the month. Much fruit was blown from the trees in Florida by the tropical storm; deciduous fruits were doing well in general, and the weather generally favored fruit drying in the Pacific Coast States.

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

55°.506 (26/7)

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The outstanding meteorological features of the month for the North Atlantic Ocean were the very severe tropical hurricane during the last decade, that will be described in the October issue, and the secondary disturbance along the coasts of the Southern Atlantic States that occurred during the same period.

Charts VIII to XV cover the period from the 23d to 30th, inclusive. Charts will also be prepared for the first few days in October, to appear in the next issue of the REVIEW, showing the track of the tropical disturbance as it moved northward along the American coast. Reports from a number of vessels are given in the table, but none of them apparently encountered the full strength of the storm, which at times reached hurricane force, as they were able to take advantage of the storm warnings and thus escape its maximum intensity.

Disturbances of extratropical origin were somewhat below the normal, as over the steamer lanes gales were

not reported on more than four days in any 5° square, the maximum occurring between the forty-fifth and fiftieth parallels and thirty-fifth and forty-fifth meridians.

Fog was reported on from 12 to 14 days over the Grand Banks; on from 8 to 13 days along the American coast, north of the thirty-fifth parallel, and on from 3 to 6 days over the middle and eastern sections of the northern steamer lanes.

On the 1st and 2d a moderate disturbance was over the eastern section of the steamer lanes, with northeasterly gales between the forty-fifth and fiftieth parallels and twentieth and thirtieth meridians.

A well-developed low that was central on the 4th near 50° N., 38° W., remained nearly stationary during the next three days, when moderate to strong gales prevailed over an area extending on the 5th from the twenty-fifth to forty-fifth meridians.

From the 7th to 11th comparatively high pressure and slight gradients, accompanied by moderate weather, was the rule over the ocean as a whole, although a few vessels in different locations encountered moderate gales.

On the 12th a low central near 52° N., 32° W., was responsible for winds of force 7 to 9 that occurred on that day as well as on the 13th over the region between the thirtieth and forty-fifth meridians.

From the 14th to 18th there ensued another period of moderate weather, except that on the 17th westerly to southerly gales were reported off the north coast of Scotland.

A moderate depression that was off the coast of eastern Florida on the 18th developed into a severe disturbance as it moved northward, and from the 20th to 23d moderate to strong northeast gales swept the coast between Hatteras and New York.

On the 21st a well-developed low was over the Shetland Islands, and on the 22d a moderate depression was central near 50° N., 40° W.

As stated before, Charts VIII to XV cover the period from the 23d to 30th, inclusive, and, besides giving an idea of the movement of the tropical disturbance, also show the conditions over the eastern section of the steamer lanes, where heavy weather occurred on the 23d and again on the last three days of the month.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian). North Atlantic Ocean, September, 1929

| Stations | Average pressure | Departure | High-est | Date | Low-est | Date |
|--------------------------------|------------------|--------------------|---------------|------------------------|---------------|--------------------|
| | <i>Inches</i> | <i>Inch</i> | <i>Inches</i> | | <i>Inches</i> | |
| Belle Isle, Newfoundland..... | 29.92 | ¹ +0.03 | 30.34 | 27th..... | 29.34 | 11th. |
| Halifax, Nova Scotia..... | 30.12 | ² +0.07 | 30.62 | 22d..... | 29.74 | 11th. |
| Nantucket..... | 30.11 | ² +0.03 | 30.50 | 22d..... | 29.90 | 14th. |
| Hatteras..... | 30.07 | ² -0.01 | 30.24 | 1st ³ | 29.92 | 18th. |
| Key West..... | 29.89 | ² -0.07 | 30.00 | 4th..... | 29.40 | 28th. |
| New Orleans..... | 29.96 | ² -0.04 | 30.08 | 1st..... | 29.72 | 30th. |
| Cape Gracias, Nicaragua..... | 29.84 | ¹ -0.07 | 29.90 | 4th..... | 29.78 | 20th. |
| Turks Island..... | 30.00 | ² +0.02 | 30.12 | 3d..... | 29.94 | 18th. ³ |
| Bermuda..... | 30.13 | ² +0.05 | 30.28 | 13th..... | 29.90 | 25th. |
| Horta, Azores..... | 30.18 | ¹ +0.02 | 30.44 | 20th..... | 29.86 | 1st. |
| Lerwick, Shetland Islands..... | 29.86 | ¹ +0.02 | 30.28 | 25th..... | 29.12 | 21st. |
| Valencia, Ireland..... | 30.13 | ¹ +0.14 | 30.36 | 7th ³ | 29.90 | 3d. |
| London..... | 30.11 | ¹ +0.11 | 30.50 | 25th..... | 29.71 | 20th. |

¹ From normals shown on Hydrographic Office Pilot Chart, based on observations at Greenwich mean noon, or 7 a. m. seventy-fifth meridian time.

² From normals based on 8 a. m. observations.

³ And on other date.

Results for Julianehaab, Greenland, are not given, as seven days observations were missing from that station.